portions of the ureteral walls. Sweet and Stewart have attacked the problem by the experimental method. By cutting one ureter, and inserting a length of rubber tubing between the severed ends, they have been able to maintain the patency of the lumen, and at the same time completely sever the lymphatic communication between the bladder and the corresponding kidney. When such an operation was performed, the urethra ligated and cut, and a virulent bouillon culture of colon bacilli injected into the bladder, an infection of the kidney on the non-operated side, with intact ureter, occurred, whereas the kidney into whose ureter the rubber tubing had been inserted remained free. Likewise, when a ureter was severed from the bladder, and passed into the intestinal tract through one of the pancreatic ducts, thus leaving the lumen patulous, but the lymphatics not in contact with virulent infection, no ascending infection occurred, but in all cases in which the ureter was implanted directly into the intestine, prompt renal involvement followed. On the other hand, in several instances, the ureter was isolated for a short portion of its course, but its continuity to the bladder not severed. The isolated portion was then dropped as a loop into the intestinal lumen through an incision in the gut wall, this being immediately closed, with great care, not to constrict the ureter either at its point of entrance or emergence from the bowel. Thus, the ureteral lumen was in no way exposed to intestinal organisms, but the lymphatics were, and in every instance infection of the kidney occurred. Finally, in several experiments, sufficient of one pole of the kidney was cut away to freely expose the pelvis, and this was planted directly into the intestinal wall. In most of these cases no general infection of the kidney substance occurred. From these experiments, Sweet and Stewart conclude that it is by means of the lymphatics, and not by means of the ureteral lumen or the bloodvessels, that ascending infection of the kidney occurs; they do not, however, deny the possibility of hematogenous infection secondary to some focus *outside* the genito-urinary tract.

Unusual Uterine Tumors.—Three cases of very rare, embryonic malignant tumors of the uterus are reported in the *Jour. Obst. and Gyn. Brit. Emp.* for January, 1914. Two of these, described by Glynn and Bell, were "rhabdomyosarcomata," occurring in two women, aged respectively sixty-two and seventy-five years. In each instance the patient had had a bloody vaginal discharge for some time, and had then passed a tumor mass *per vaginam*, following which hysterectomy was performed. In the first case the uterus was enlarged to the size of a three-months' pregnancy, due to the presence of a tumor growing from the posterior wall, which showed microscopically a mixture of small spindle and very large oval or round cells, with somewhat peripherally situated nuclei. These latter were found to be in reality embryonic muscle cells, cut transversely; in places a few of these cut longitudinally were seen, showing here distinct transverse striations. This patient died six months after operation, with symptoms suggesting pulmonary metastases, but no autopsy was performed. In the second case the diagnosis was made from histological examination of the spontaneously discharged polypoid mass, and a panhysterectomy was then done. Three months later the patient returned with symptoms of intestinal obstruction; at re-operation the abdomen was found filled with recurrent masses, and the patient died ten days later. The polypoid mass in this instance showed a mixed-celled sarcoma, with numerous giant cells and embryonic striped fibers. The growth in the extirpated uterus, on the other hand, was composed entirely of mixed-celled sarcomas. In neither of these cases were areas of cartilage, glands, or other types of tissue present. The third case, reported by Murray and Littler, occurred in a woman, aged forty-six years. She, likewise, had noticed for some time an unpleasant watery discharge; upon examination a soft polyp was seen projecting from the cervix, and was removed, shortly after which a panhysterectomy was performed. The patient made a good recovery, and up to the time of the report (three months later) did not show signs of recurrence. Histological examination of both the polyp and the polypoid endometrium in the extirpated uterus showed an extremely complex aggregation of tissues—the stroma showed all gradations from a fibrosarcoma to spindle-celled and round-celled sarcoma; there were no giant-cells, but scattered throughout the tissue were numerous areas of hyaline cartilage and many gland-like spaces, lined by a single layer of columnar epithelium, and much resembling the normal endometrial glands. No striated muscle fibers were found. The neoplastic process appeared to be entirely confined to the endometrium, no invasion of the musculature being demonstrable. The last-described tumor is called by Glynn and Bell an "adenochondrosarcoma;" it undoubtedly belongs, however, to the same general group as the first two, *i. e.*, to the category of mesodermal mixed tumors, which probably arise from displacements of embryonic mesodermal tissue from the lumbar region during early life. The high grade of malignancy of the majority of such neoplasms is well illustrated by the course of the first two cases.

Abdominal Exercise in the Treatment of Dysmenorrhea.—MOSHER (*Jour. Amer. Med. Assoc.*, 1914, lxii, 1297), has been making for a number of years careful clinical and experimental studies of so-called functional dysmenorrhea, and has come to the conclusion that it is in the large majority of cases *congestive* in origin, the chief factors responsible for its production being: (1) the upright position, (2) alteration of the normal type of respiration by disuse of the diaphragm, (3) lack of general muscular development, (4) inactivity during the menstrual period, (5) psychic influences. The long column of blood in the valveless vena cava, associated with lowered general blood-pressure at the time of menstruation, the local blood-pressure in the uterus being raised, however, all tend to produce congestion, which is frequently so excessive as to cause dysmenorrhea. The upright position, lax abdominal muscles, costal instead of diaphragmatic breathing, and constriction of the body by clothing which interferes with the use of the abdominal muscles and diaphragm, all combine to develop and promote this pelvic congestion. To correct this condition, Mosher says she has found the following very simple procedure extremely efficacious: All tight clothing is removed, and the patient is placed on her back, on a level surface, in the horizontal position. The knees are flexed, and the arms are placed at the sides to secure relaxation of the abdominal muscles. One hand is allowed to rest on the abdominal wall